PYROTECH SMART CITY





SMART CITY

- A city equipped with basic infrastructure to give a decent quality of life, a clean and sustainable environment through application of some smart solutions.
- A **smart city** is an urban area that uses different types of electronic data collection sensors to supply information which is used to manage assets and resources efficiently. This includes data collected from citizens, devices, and assets that is processed and analyzed to monitor and manage traffic and transportation systems, power plants, water supply networks, waste management, law enforcement, information systems, schools, libraries, hospitals, and other community services.
- Smart city technology allows city officials to interact directly with both community and city infrastructure and to monitor what is happening in the city and how the city is evolving.



SMART POLE

- When darkness falls, street lights help us find our way. They hold enormous potential.
- What if they, as well as emitting light, could also charge e-cars, provide free WiFi and make public spaces safer?
- Then simple street lights would become multifunctional, networked Smart Poles.
- They help local authorities, energy utilities and companies to overcome the challenges ahead.
- We have developed Smart Poles and look after their installation, operation and maintenance. Our customers can choose between completely new poles or upgrading existing ones with smart systems.



Introduction

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 They hold enormous potential.
- What if they, as well as emitting light, could also charge e-cars, provide free WiFi and make public spaces safer?
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WHAT IS THE SMART POLE?

The Smart Pole is a turn-key Smart Product, utilizing MPS technologies embedded within steel Tubular / Square poles for public safety, anti-theft, crime prevention, surveillance anti-terrorism and numerous lighting applications.

HOW DOES THE SMART POLE WORK?

The Smart Pole integrates the latest technology components with the specific features that you are looking for. Each Smart Pole can be custom built to your particular requirements.



SMART POLE OPTIONS & BENEFITS

- LED LIGHTING
- HI-DEF CAMERAS
- TRAFFIC SIGNAL
- ENVIRONMENTAL SENSOR
- SOLAR CHARGING PANEL
- ELECTRIC VEHICLE CHARGER
- DYNAMIC DISPLAY BOARD
- MOBILE MULTIPLE CHARGING POINT
- WI-FI
- 2-WAY AUDIO (SPEAKER)
- PANIC BUTTON/EMERGENCY ASSISTANCE
- RFID / COMMUNICATION
- DRONE CHARGING PAD



Good reasons for Smart Poles

Connectivity



Public internet connection points are more in demand than ever before. This is where Smart Poles come into play – in particular in conurbations and rural areas where the mobile data network needs to be improved anyway. At the same time they are important bases for 5G-networks, the next generation of mobile phone and data networks.



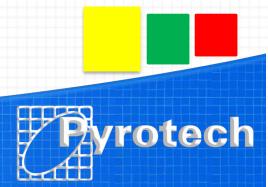
Mobility

The future belongs to electric vehicles. They need more public charging points in order to be used even more widely. Therefore it is possible to charge vehicles at our Smart Poles.



Communication

General or targeted ads that are relevant to customers or citizens can be displayed on LED screens.



Good reasons for Smart Poles



Security

Our intelligent street lights provide security though integrated Cameras and panic buttons. They also help improve traffic management and enable smart parking.



Sustainability

In order for the energy transition to succeed, municipalities must achieve their emission targets too. Smart Poles can help to achieve this – for example with environmental sensors that measure the particulate content of the air.



Cost efficiency

Street lights in need of modernization incur high costs. The LED lights used in the Smart Poles save municipalities, energy utilities and companies money.

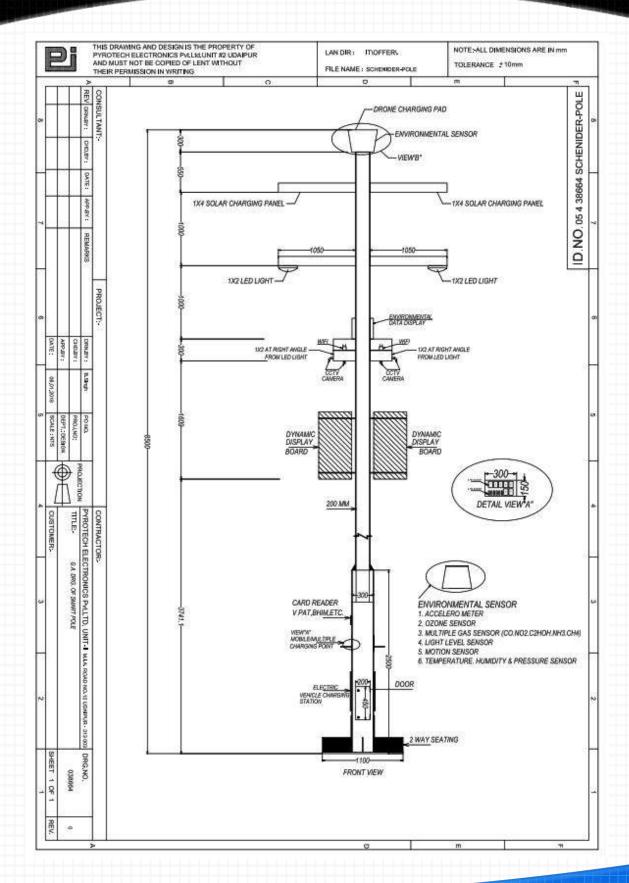


Smart Poles Photos

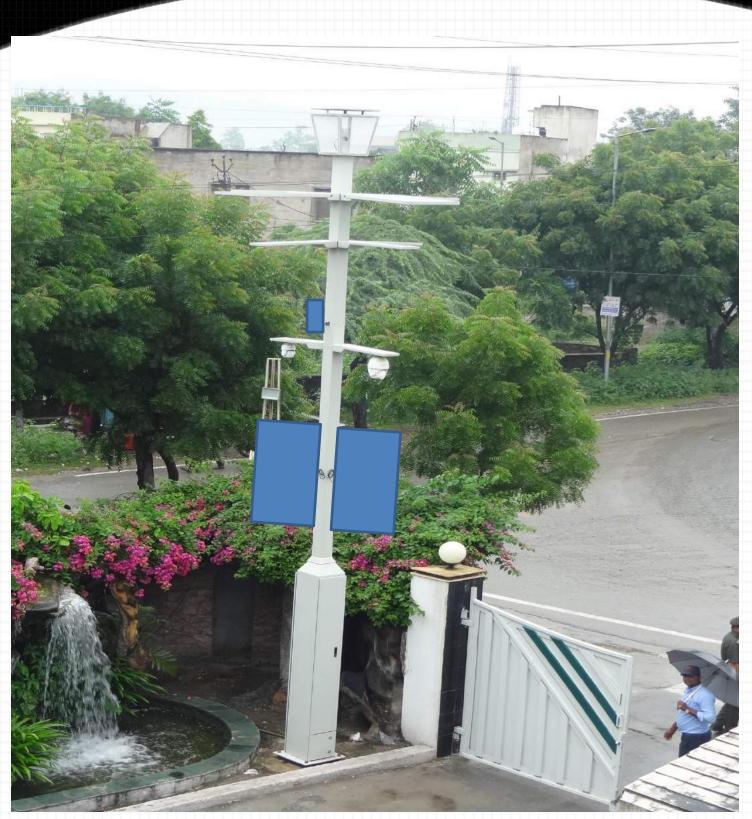




Smart Poles Drawing 1



Smart Poles Drawing 1



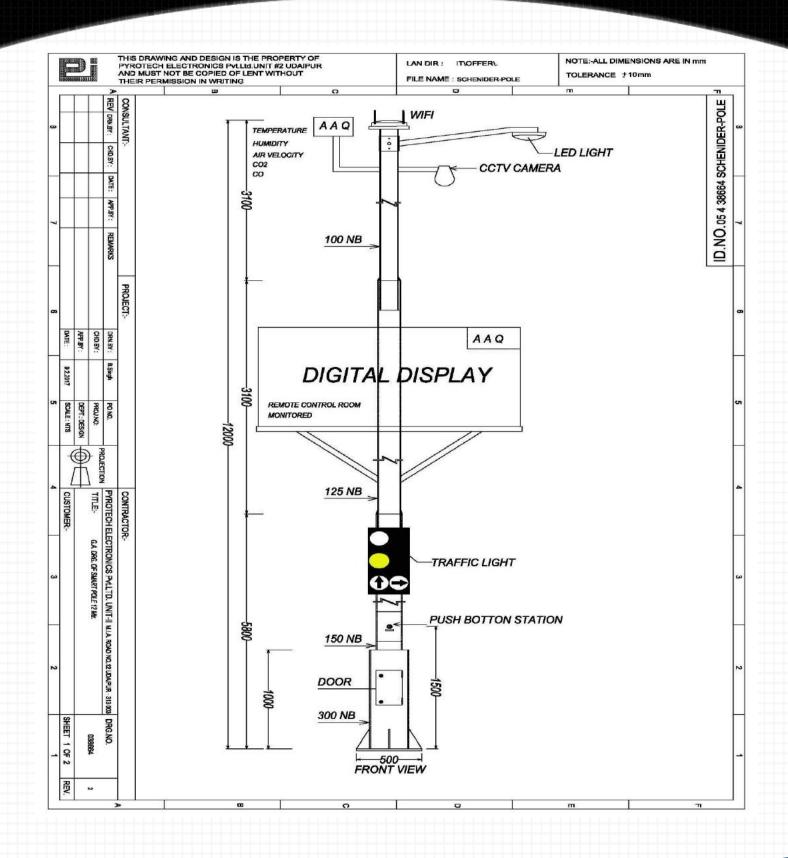
Note:

- 1. Wi-Fi to be mounted.
- 2. 2 Nos. LED Display to be mounted below camera

Sample Smart Pole which is installed at Pyrotech Factory Gate



Smart Poles Drawing 2



BUSINESS/INDUSTRY

- Public places
- Roads & Highways
- Schools & Education
- Oil, Gas & Energy
- Parking Lots
- Airports & Marinas
- Recreation & Sports



Item Code – 280

Item Name – Poles (Traffic Signal / Camera Pole / Advertising Pole / Lighting Poles / Garden Poles)

Brief Specifications:

- *Pole comply BS 505; 1971 / IS 1239 / IS 2713 / IS 800 / IS 875
- *Poles are designed and manufactured for durability, wear and corrosion resistance, and visual appeal.
- Poles built to the exact specifications of individual Customer and municipalities
- * Poles are available in Tubular & square pole Material: MS / GI.
- ❖ Poles can be supplied with a galvanized finish, paint over galvanized finish, or a factory finish paint coat in a decorative urban application.

Features:

- Sturdy Construction
- ***** Corrosion Resistance
- **Smooth Finish**
- Shock Resistance
- ***** Low Maintenance
- ***** Easy Installation

Application:

- * Roadway
 Intersection
- * Pedestrian Crossing
- * Railway Crossing
- Railway Signaling

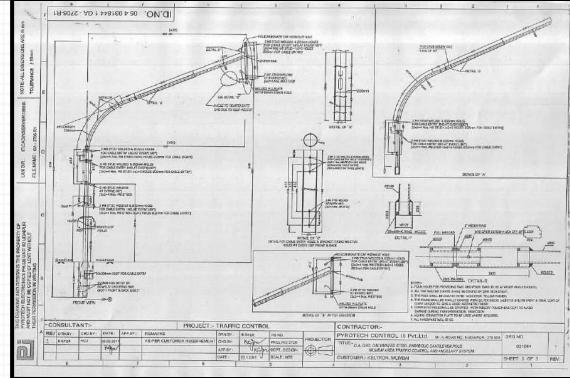


Traffic Signal Poles:

Traffic signal poles are available in a wide array of sizes & Types:

Types of Traffic Signal Poles

- **Straight Signal Pole**
- Cantilever Signal Pole
- **&** Gantry Signal Pole













Camera Pole

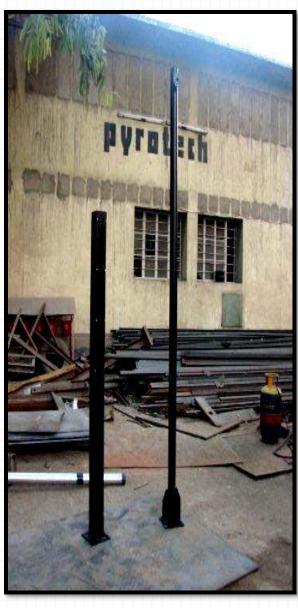
Camera Poles / Security Poles are available in various range as per mounting arrangement and maintenance point.

LADDER WITH SAFTEY CAGE

CONVENTIONAL TYPE

LADDER TYPE









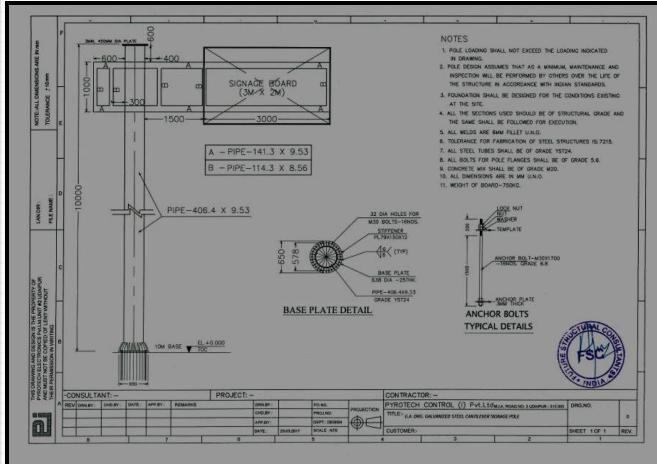
ADVERTISING POLE

Advertising / VMS Pole

Advertising poles are available in Unipole, Cantilever and Gantry Poles.

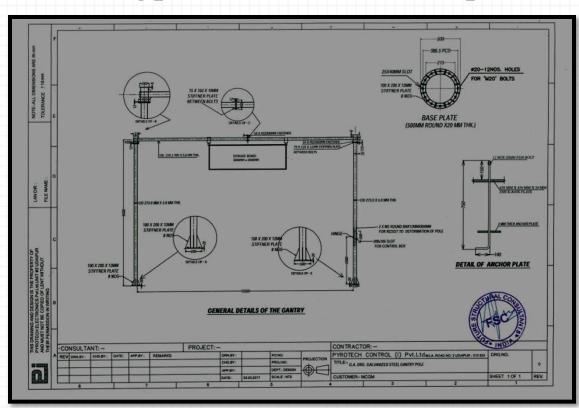


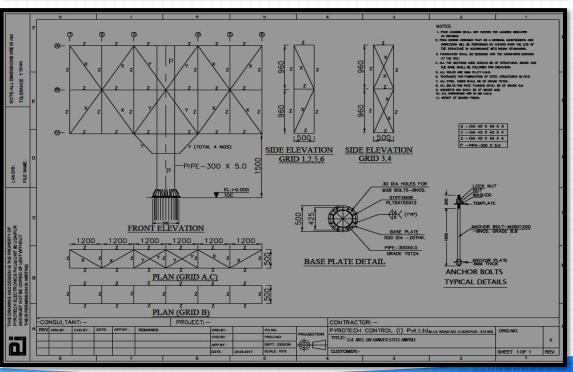
Cantilever Pole



Advertising / VMS Pole

Advertising poles are available in Unipole, Cantilever and Gantry Poles.









Lighting Poles:

Lighting Poles & Brackets also accommodate signal or multiple luminaries mounting giving greater flexibility.

Types of Lighting Pole









Garden Poles:

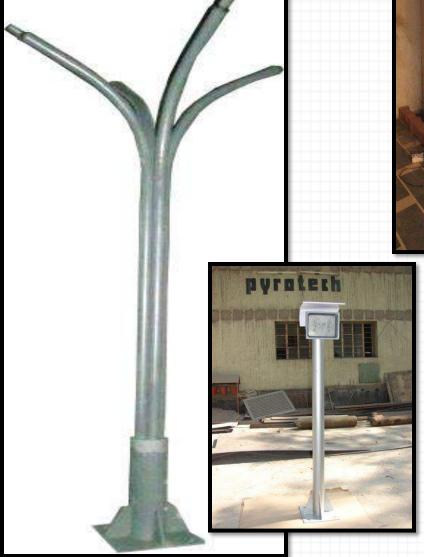
Garden Poles Decorative Pole as per customer requirement & our design.

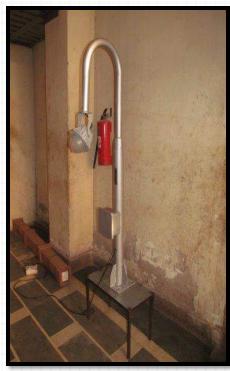
POST LAMP

SQUARE POLE



SWAN POLE









References

Customer	City	End User	Item Description
Honeywell Automation (I) Ltd.	Pune	IOCL	10 M Pole
Larsen and Toubro Limited	Mumbai	IOCL	Supply of 8 m pole
Honeywell Automation (I) Ltd.	Pune	Reliance	Pole with ladder
Realty Automation & Security Systems Pvt. Ltd.	Pune	IOCL	Pyrotech Make Octogonal Pole 6 Mtr
Realty Automation & Security Systems Pvt. Ltd.	Pune	IOCL	Pyrotech Make Octogonal Pole 8 Mtr
Realty Automation & Security Systems Pvt. Ltd.	Pune	IOCL	Ptrotech Make Octogonal Pole 10 Mtr
CMS Traffic Systems Ltd.	Mumbai	MCGM	Traffic Signal Pole & Accessories
Larsen and Toubro Limited	Mumbai	IOCL	SITC Design of 10 m octagonal pole
CMS Traffic Systems Ltd.	Mumbai	MCGM	Traffic Signal Pole & Accessories
Trafitek Solutions Pvt. Ltd.	Thane	MCGM	Traffic Signal Pole & Accessories
Siemens Limited	Navi Mumbai	Reliance	Camera Pole
Larsen and Toubro Limited	Mumbai	IOCL	8m GI Pole
Pyrotech Electronics P. Ltd. Unit 1	Udaipur	Binani Cement	Solar Pole With battery Box
Kores India Limited	Navi Mumbai	Process Plant	Lighting Poles
ARS Traffic & Transport Technology (INDIA) Pvt Ltd PUNE	Pune	MCGM	Traffic Signal Pole & Accessories
Kerala State Electronics Development Corp. Ltd.	Mumbai	MCGM	Traffic Signal Pole & Accessories
Thales India Pvt. Ltd	New Delhi	BEL	Antenna Mast
Polixel Security Systems Pvt. Ltd.	Gurgaon	CEPL, Chennai	Pole with Ladder & saftey Cage
CMS Traffic Systems Ltd.	Mumbai	MCGM	Traffic Signal Pole & Accessories
Polixel Security Systems Pvt. Ltd.	Gurgaon	ONGC	Pole with Ladder & saftey Cage
EIP Enviro Level Control Pvt. Ltd.	Noida	Railway Signal	Signal Pole with Hooter JB

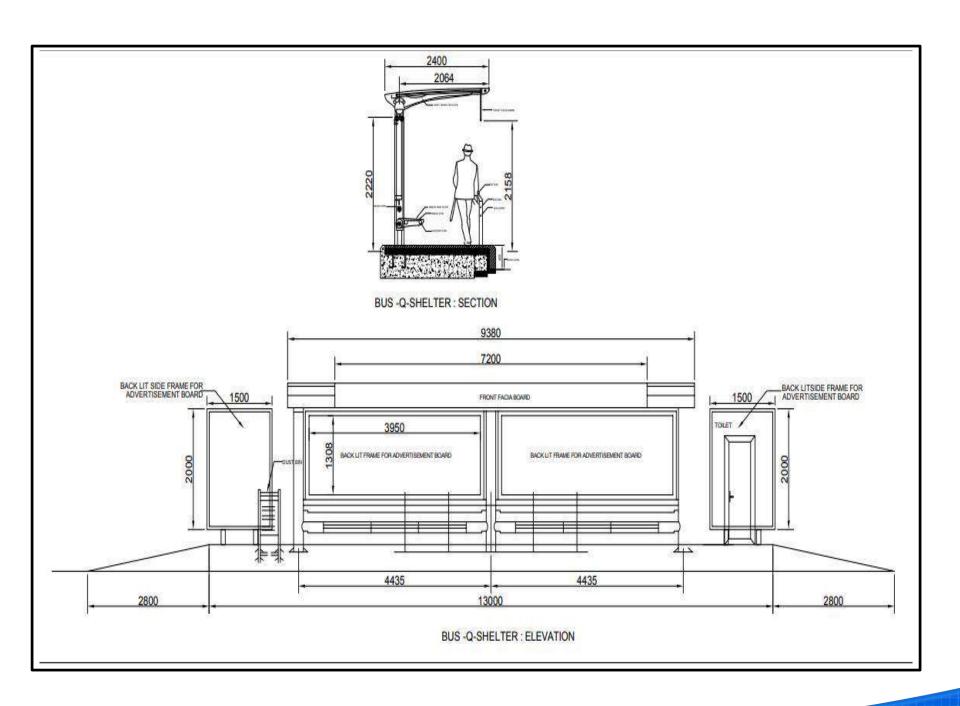


SALIENT FEATURES

- Manufactured with Stainless Steel 304 grade tubular structure and trussed roof (size - 9.380 x 2.45 mtr.)
- Stainless Steel section for support of ceiling
- Top roof sheet of 10 mm thick multiwall polycarbonate with 35% light transmission.
- Tubular bench made of Stainless Steel 304 grade pipe & plate between the vertical posts with seating capacity 12 persons
- Front Stainless Steel railing for safety and support.
- Stainless Steel Dustbin
- Front Facia Information board with necessary information format pasted on vinyl sheet min. 85 micron thick.



DRAWING OF UDAIPUR SMART CITY





- COMMERCIAL ADD Back Lit Aluminum Signage's Board
- (2 nos) with inbuilt strong clipping & frame arrangement for holding the flex or digital media along with all necessary cleats and corner
- Middle signage board 2nos.
- Stand alone signage board -2nos
- PASSENGER INFORMATION SYSTEM DISPLAY semi outdoor SMD LED display with short viewing distances, the fine pitch LED screen features, anti-glare surface and provides an excellent contrast.
- Amplifier and speakers for PUBLIC ADDRESS SYSTEM
- MS junction box with terminal for inter connections.
- For Earthing of bus Q-shelter Gel Earthing to be provided
- Electrical Feeder Box with all Accessories for supply of all equipment
- Portable Toilet.









PIS DISPLAY WITH PA SYSTEM



LED Passenger Information Screen

Landscape Passenger Information screens over Powerline Comms



- Single Colour, Dot-Matrix Style Display Screen
- PRM / Tsi Compliant Text Presentation

LCD Passenger Information Screen

Landscape PIS screens over Powerline Comms or Ethernet Backbone Offering rich video content

- Full Colour -
- Clear, Crisp Text & Graphics -
- **HD Multimedia Capability -**
 - Real Time Clock -



Common Stakeholders

Motivations toward implementing smart bus shelters include improving how people use bus shelters to access information about the buses, and their surroundings.

The common stakeholders involved include:

- **1. Public transport provider (bus company)**: Bus companies view smart bus shelters as an opportunity to provide better service to commuters in terms of information concerning arrival times for buses and their location on the map.
- **2. Businesses and Institutions**: Several businesses and institutions use bus shelters to advertise or communicate to the public. Most businesses attempt to advertise to their target market by strategically placing advertisement in the best (busiest) bus shelters, to widen the scope to more viewers.



- **3. Outdoor media companies**: Bus shelters have an interesting business model as they are primarily built and managed by private outdoor media companies, who enter into long-term leasing agreements with cities or transportation agencies. An appropriate profile of the demographics and interests of bus shelter commuters can be useful to better monetize its digital signage advertising
- **4. Commuter**: Refers to the person using the bus shelter. Smart bus shelters aim to provide commuters with a better experience while waiting for the bus.



PYROTECH BUS Q-SHELTER









BUS SHELTER IN UDAIPUR SUPPLY AND INSTALLED BY PYROTECH





Photographs of Pyrotech Bus Shelter at Installation Period



FEEDER PILLER

FEEDER PILLER:

We are engaged in manufacturing and supplying a wide range of Electric Panels which are available in market with the name of MCC, PCC, HIGH DENSITY MCC, INTELEGENT MCC, PDB, LDB & FEEDER PILLER.

A distribution board (also known as Feeder Piller, Breaker Panel, or Electric Panel) is a component of an electricity supply system that divides an electrical power feed into subsidiary circuits, while providing a protective Fuse or circuit breaker for each circuit in a common enclosure.

We are providing Smart Feeder Piller in Smart City.



FEEDER PILLER

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FEEDER PILLER

FEEDER PILLER:







Major Approvals

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- Municipal corporation of Greater Mumbai
- Municipal corporation, Pune
- Indian Oil
- *Reliance
- ***** TSGENCO
- Municipal corporation, Nasik
- Municipal corporation, Udaipur



Major Customer & End User

Top Customer:

- Keltron, Mumbai
- CMS, Mumbai
- Trafitek, Thane
- Seimens
- ❖ARS | Traffic, Pune
- Toshniwal Industries
- ❖ Polixel Security

End Users:

- Municipal corp. of Greater Mumbai
- **❖** Reliance
- ***ITC**
- ***NTPC**
- **❖**ONGC, Kakinada
- **❖**CPCL, Chennai



Product Range For Municipal Corporation & Smart City

- Traffic Signal Pole (Straight/Cantilever/Gantry Pole)
- *CCTV / Security/ VMS Pole (Straight/Cantilever/ Gantry Pole)
- **Smart Pole having facility of signal, CCTV, VMS, Wifi, Clamatic parameter e.g. Humidity & time etc.**
- * Street Light, Garden Poles & decorative garden LED Light.
- **LED Lights & CCTV Camera surveillance.**
- ***Information Kiosk.**
- **❖Junction Box (CRCA / GI / SS / Aluzinc).**
- **MCC Panel (Drawout / Non Drawout type) up to 4000Amps.**
- **AC DB(Main Lighting DB's & Lighting DB's up to4000Amps)**
- **& Bus Shelter**
- **LVS / LCD/ Display Controller**
- **Computer Furniture**
- ***Control Desks**
- *****HT Panel for 11Kv & 33Kv Outdoor & Indoor
- **♦** Compact Sub-Station for 11Kv
- **❖Networking Panel**
- *Cable Tray (CRCA / GI / SS/ Aluzinc)
- Porta Cabin (Shelter as Control Room)



Major Order in Smart City

PO in Hand and work in Progress:

- **❖Smart Bus Shelter (Smart Bus Stand) − 50 Nos.,** Smart City, Udaipur Rs.5.5C
- ❖ Fidder Panels for Smart City 325Nos.Smart City, Udaipur Rs.1.85C

PO Awaited:

- **❖Smart Bus Shelter (Smart Bus Stand) − 50 Nos.,** Smart City, Udaipur Rs.5.5C
- ❖ Lighting Poles & City − 5000Nos.Smart City, Udaipur Rs. 5.15C



THANK YOU...

